

LRFD Bridge Design Manual Update ~ July 2013

16 July 24 June 2013

General and minor editing changes

No general editing changes.

Policy and significant editing changes

Article	LRFD
2.1	Revise policy overview for new quality control/quality assurance (QC/QA) plan.
2.2	Add definitions for file, QA, and QC.
2.3	Add abbreviations for EOR, PIN, QA, QC, and TEM.
2.5	Revise information about and references to Design Manual.
2.6.2	Add text about standard beams, and add potential need for final design adjustment. Note that Preliminary Article 3.2.6.4 has added information, and that article no longer matches 2.6.2.
2.10	Insert QC/QA program.
C2.10.5	Add QC/QA Record.
3.1.3	Add definition of Q100.
3.2.2.7.5.3	Clarify discharge. Correct Design Manual reference.
C3.2.2.7.5.3	Correct Design Manual reference.
3.2.4.3	Note that early coordination applies also to BNSF and UP.
3.2.4.4	Refer to Commentary for BNSF and UP submittals.
C3.2.4.4	List Methods Memo 201.
3.2.5	Add preference for flared wing headwalls for a box culvert used for a path or trail.
3.2.6.4	Clarify sloped beam guidelines. Add guidelines for grade correction for replacement rural bridges.
3.2.6.9	Add new article for superstructure staging.
3.2.7.2	Add guidelines for bottom of abutment footing elevations.
3.2.7.3.3	Clarify Point B. Add berm slope location Point D for dual bridges with complex or non-uniform berms.
C3.2.7.3.3	Add dual bridge berm slope location table example for dual bridges.
3.2.8	Add cast-in-place culvert costs.
3.2.10.1	Add procedures for temporary stream crossing hydraulic modeling.
5.5.2.1.1	Remove option for HS-25 design of substructure.
5.5.2.4.1.10	Remove requirement that exterior beam webs be from the same steel mill.
5.7.4.2.1	Revise analysis and design of steel reinforced elastomeric bearings for change in AASHTO rotation/uplift requirement.
6.2.6.1	For checking uplift add $\phi = 0.75$ at the extreme event limit state.
6.4.4.1	Revise eccentricity limit to 0.45 to match AASHTO change.
6.4.5.1	Revise eccentricity limit to 1/3 to match AASHTO change.
6.5.4.1.1, 6.5.4.2.1	Revise mass concrete thickness for abutments to cover a tapered thickness.

C6.5.4.1.1, C6.5.4.2.1	Add commentary for mass concrete provision.
6.6.4.1.1.1, 6.6.4.1.2.1	Revise mass concrete thickness for pier caps and columns to cover a tapered thickness.
C6.6.4.1.1.1, C6.6.4.1.2.1	Add commentary for mass concrete provision.
6.6.4.2.1.1	Delete column for plan sheet bearing in Table 6.6.4.2.1.1.
8.2	Add plan development guidelines for projects with cast-in-place culverts, and add foreslope-parapet intersection diagram.
8.2.4.5.3	Add m9 bars at bell joints to shortening guidelines.
8.2.4.5.5.2	Replace weep hole figures for consistency.
8.2.4.9.2	Add new article 8.2.4.9.2, text, and figures for skewed culvert extensions.
8.3	Add plan development guidelines for projects with precast culverts, and add foreslope-lintel beam intersection diagram.
C8.3	Move Methods Memos 125 and 224 to obsolete list at end of section.
8.3.4.2.2	Add weep hole article and figures for precast box culverts.
11.2.1, 11.2.2	Remove redundant CADD Note E47/M47 for one contractor on site.
11.5.1, 11.5.2	Add a new note, E429, for vertical tolerance and horizontal support during raising of a superstructure.
11.5.2	Edit E480/M480 for clarity.
11.7.1, 11.7.2	Remove outdated CADD Notes E609A/M609A, E609B/M609B, and E609C/M609C for culvert standards.
11.9.2	In notes E930 and M930 remove requirement that exterior beam webs be from the same steel mill.
11.10.1, 11.10.2	Add CADD Note E1005 for sealing of prestressed concrete beam ends.

Article	ASD/LFD
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